Amendments to the Specification

Before paragraph [0002], please add the following heading: --BACKGROUND--.

Please replace paragraph [0011] with the following amended paragraph:

[0011] All These known methods have the disadvantage that they are not able to recognize a mask which is applied to a vital object.

Before paragraph [00012], please add the following heading: --SUMMARY OF THE INVENTION--.

Please replace paragraph [0012] with the following amended paragraph:

[0012] The present invention is underlied by the problem An object of the present invention is to specify a method and an apparatus of the initially said type with which a high fraud resistance is reached. The present invention shall be is applicable modularly with existing methods of recognition and shall recognize imitations securely which have been created by applying masks onto the objects to be recognized.

Please replace paragraph [0013] with the following amended paragraph: [0013] According to the The present invention, the problem is solved by provides a method for recognition of biometric data, in particular for the recognition of characteristics of fingers and of faces of persons, comprising: illuminating at least one of stripes and a grid on the uneven surface using at least one light source; detecting, without a touching contact, light reflected from the uneven surface at a plurality of discrete locations so as to create a partial image of the uneven surface at each of the plurality of discrete locations; selectively analyzing each of the partial images; and combining at least portions of the partial images into an overall image of the uneven surface. The present invention also provides an arrangement for a touchless detection of data of an uneven surface of an object, comprising: an imaging optical system including an electronic camera oriented perpendicular to the uneven surface; a plurality of line-shaped light sources for illuminating the uneven surface disposed in row on each side of the electronic camera; an analyzing unit for electronic image processing including an electronic control unit couple to the electronic camera and configured to assign a partial image corresponding to each of the plurality of light sources and to process the partial images into an overall image comprising the attributes given in claim 1 and by an

apparatus comprising the attributes given in claim 13.

Please replace paragraph [0014] with the following amended paragraph:

[0014] Advantageous embodiments are given in the dependent claims described in the specification and in the claims.

Before paragraph [0034], please add the following heading: --BRIEF DESCRIPTION OF THE DRAWINGS--.

Before paragraph [0047], please add the following heading: --DETAILED DESCRIPTION--.

Please delete paragraph [0076] including the entire list of reference numbers.

In the Abstract

Please replace the following amended Abstract:

ABSTRACT

- 1. Method and Apparatus for recognition of biometric data with high fraud resistance
- 2.1 The present invention is underlied by the problem to specify a method and an apparatus of the initially said type with which a high fraud resistance is reached. The present invention shall be applicable modularly with existing methods of recognition and shall recognize imitations securely which have been created by applying masks onto the objects to be recognized.
- 2.2 According to the present invention, the problem is solved by acquiring the object (1) simultaneously from at least two different imaging directions and calculating a three-dimensional model of the observed object (1) from at least two images and comparing the calculated model to a reference model acquired from also several images, wherein the object (1) is recognized to be right if the acquired data gained from the images are simultaneously in concordance with each other apart from predetermined tolerances respectively.

2.3 The present invention relates to a A method and an apparatus for recognition of biometric data with high fraud resistance, in particular for recognition of characteristics of fingers and of faces, wherein an object is acquired by optical scanning and numerical parameters are acquired by means of digital image processing.